

**REMARKS/ARGUMENTS**

Reconsideration and withdrawal of the rejections in the outstanding Office Action are respectfully requested in view of the foregoing amendments and the following remarks.

**Summary of Status of Amendments and Office Action**

Claims 1-6 and 8-15 are pending in the application, and under consideration. Claims 1 and 8-10 are independent. Claims 14 and 15 have been added. Applicants have canceled claim 7 without prejudice or disclaimer regarding the subject matter recited therein.

Applicants have amended claims 1, 6, and 8 to more clearly recite the claimed subject matter. For example, Applicants have rewritten claim 6 to recite "A load-unload system magnetic disk device comprising a magnetic disk manufactured by the process of claim 1." Applicants have amended claims 1 and 8 to further recite "a lubricating layer having -COOH and/or -CF<sub>2</sub>COOH atomic groups." Applicants have added new dependent claims 14 and 15. Support for the amendments is found in the application as filed, for example, at page 11, first full paragraph. No new matter is added.

**Claim of Priority and Drawings**

Applicants express appreciation for the acknowledgement of the claim of priority to Japanese Application No. 2003-96820, filed March 31, 2003, and Japanese Application No. 2003-361982, filed October 22, 2003, and receipt of the certified copies of the same, and for acknowledging that the drawings filed on March 26, 2004 are accepted.

**Information Disclosure Statement**

The Examiner has also indicated consideration of the Information Disclosure Statements filed June 28, 2004, and September 14, 2004, by returning initialed copies of the Forms PTO-1449 submitted therein.

In addition, Applicants submit herewith an Information Disclosure Statement (IDS) citing an Office Action and documents received by the Applicants from the Japanese Patent Office in a counterpart Japanese application. Applicants respectfully request that the Examiner consider the IDS and return initialed copies of the Form PTO-1449 with the next communication from the PTO.

**Indefiniteness Rejection Under 35 U.S.C. § 112, second paragraph**

Claim 7 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because of the use of trade names that identify the product source rather than the products themselves. Applicants cancel claim 7 without prejudice or disclaimer to the subject matter therein, and without acquiescence or expressing any agreement with the rejection. Accordingly, the rejection of claim 7 is moot.

**Rejections Under 35 U.S.C. § 112, first paragraph****Enablement**

Claims 1-13 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement because the specification, while being enabling for a magnetic disc and a method of manufacturing magnetic discs having a carbon protective layer formed by plasma CVD and heated after coating by the

lubricant, allegedly does not reasonably enable one skilled in the art to make and use a disc or method not having this layer. The rejection is moot in regard to claim 7 that has been canceled by the above amendment.

The rejection specifically asserts that the specification makes clear that the effect of the present invention was found to result from the incorporation of  $\text{-COOH}$  atomic groups and/or  $\text{CF}_2\text{COOH}$  atomic groups into the lubricating layer, and that these groups only come from a plasma CVD carbon layer. Applicants traverse the rejection.

In order to advance prosecution, and without acquiescence or expressing any agreement with the rejection, Applicants have amended independent claims 1 and 8 to further recite "a lubricating layer having  $\text{-COOH}$  and/or  $\text{-CF}_2\text{COOH}$  atomic groups." Support for the amendment is found in the as-filed specification, for example, at page 11, first full paragraph. Furthermore, Applicants note that the magnetic disc of independent claims 9 and 10 recite a lubricating layer containing  $\text{-COOH}$  atomic groups, and therefore all pending claims are enabled by the specification for the same reasons. Accordingly, one of skill in the art would understand that the described magnetic disc combined with this recited lubricating layer enables the claimed invention without reciting any method of production, such as a layer being formed from a plasma CVD carbon layer.

Applicants respectfully request reconsideration and withdrawal of the enablement rejection of 1-13 under 35 U.S.C. § 112, first paragraph.

**Rejections Under 35 U.S.C. § 103(a)****Sakaguchi, Gui-1, Gui-2, Osawa**

Claims 1-13 are rejected under 35 U.S.C. § 103(a) over U.S. Patent 6,316,062 to Sakaguchi et al. ("Sakaguchi"), in view of U.S. Patent 6,099,937 to Gui ("Gui-1"), U.S. Patent 6,548,140 to Gui ("Gui-2"), and U.S. Patent Application US2003/0100454 to Osawa et al. ("Osawa"). The rejection is moot in regard to claim 7 that has been canceled by the above amendment.

To establish a prima facie case of obviousness, the combination of cited references with the knowledge generally available to one of ordinary skill in the art must teach or suggest all of the recited limitations of the claims. Also, the Office must demonstrate that there is some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine reference teachings. In addition, the Office must demonstrate that there was a reasonable expectation of success. See MPEP 2143. Furthermore, the teaching or suggestion to make the claimed modification must be found in the prior art, not in the Applicants' disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991). In the present case, the Office has failed to make a prima facie case of obviousness because it has not met any, let alone all of the above criteria.

Sakaguchi discloses a mixture of ZDOL and ZTETRAOL (Table 12) but fails to teach the specific lubricant used in the present invention. The rejection states that Sakaguchi discloses a magnetic disc comprising a magnetic layer, a carbon protective layer formed by CVD and a lubricant layer. The rejection further states that the carbon

layer was heated to 120°C and would therefore have injected –COOH groups into the lubricant layer. The rejection admits that Sakaguchi does not teach the molecular weight range of the ZDOL or ZTETRAOL used.

Osawa discloses deletion of ZDOL contained in the ZTETRAOL by supercritical extraction but fails to teach mixing of the specifically recited lubricant *a* and *b* having a molecular weight dispersion of less than or equal to 1.2.

The rejection then relies on Gui I and Gui II to teach the molecular weight fractionation by supercritical extraction of these lubricants including the narrowing of the molecular weight distribution. The rejection concludes that it would have been obvious to subject these lubricants to fractionation to remove the high and low fractions to improve properties. The rejection further states that Osawa teaches the fractionation of ZTETRAOL and arriving at a blend of fractionated components as presently claimed lubricants *a* and *b*.

First, Applicants submit that Sakaguchi, Gui I, Gui II, and Osawa, taken separately or in combination, fail to teach or suggest the specifically recited lubricant *a* and *b* having a molecular weight dispersion of less than or equal to 1.2. For at least this reason, a prima facie case of obviousness has not been properly established.

Second, Applicants also traverse the rejection as the Office has not established a prima facie case of obviousness for the additional reason that there is no motivation in the cited documents for the ordinary skilled artisan to combine the documents at the time of filing to devise the claimed invention.

The suggestion to combine or modify the prior art teachings must be clear and particular. See *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Thus, while a

person of ordinary skill in the art may possess the requisite knowledge and ability to modify the prior art, that modification is not obvious unless the prior art suggested the desirability of such a modification. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). Furthermore, the Office has the burden to provide some objective evidence, not found in the Applicants' specification, or reasoned argument showing that one of ordinary skill in the art would have been motivated to combine the prior art to devise the claimed invention. *In re Lee*, 277 F.3d 1338, 1433 (Fed. Cir. 2002).

Applicants submit that the Office has failed to establish a *prima facie* case of obviousness because there simply is no clear and particular suggestion in the cited references to combine the teachings to subject lubricants to fractionation to remove the high and low fractions to improve properties as claimed. The Examiner has not provided WHAT properties can be improved which would suggest the combination of the documents. Accordingly, the rejection fails to provide some objective evidence, not found in the Applicants' specification, or reasoned argument showing that one of ordinary skill in the art would have been motivated to combine the prior art to devise the claimed invention.

Regarding claim 6, the rejection states that claim 6 is considered to recite an intended use and therefore does not support patentability of the method or disc per se. Applicants note that they have amended claim 6 to recite: "A load-unload system magnetic disk device comprising a magnetic disk manufactured by the process of claim 1", and that the magnetic disc of claim 6 comprises the same structural recitations as claim 1. Therefore, the same arguments presented above also apply to the rejection of claim 6.

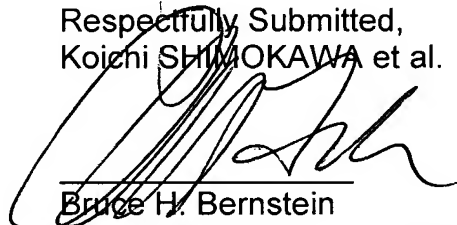
Therefore, the Examiner has not met the burden of showing a prima facie case of obviousness. For at least these reasons, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under 35 U.S.C. §103(a).

**CONCLUSION**

For the foregoing reasons, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested.

If the Examiner has any questions, or wishes to discuss this matter, the Examiner is respectfully invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,  
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